

### **Abstract of the Disclosure**

An egg-shaped anaerobic sludge digester has upper and lower draft tubes, and an optional middle draft tube. The draft tubes are arranged so that liquid can be (1) simultaneously pumped downwards through the upper (or middle) draft tube and upwards through the lower (or middle) draft tube; (2) simultaneously pumped upwards through two or more draft tubes; or (3) simultaneously pumped downwards through two or more draft tubes. When a middle draft tube is provided, it can be used in place of the upper draft tube when the liquid surface in the digester falls below the top of the upper draft tube. Alternatively, the middle draft tube can work as a coordinated relay conduit to move liquid either in the same direction as the upper draft tube or to move liquid in the same direction as the lower draft tube.